



HACC, Central Pennsylvania's Community College

Request for Proposal (RFP)

Commissioning Authority Services

Senator John J. Shumaker - Public Safety Center
Implementation of Master Plan – Phase 1

HACC Solicitation No. 10-39

March 30, 2010

Thomas J. Fogarty
Executive Director – Procurement and Business Services
One HACC Drive
Harrisburg, PA 17110

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I. Introduction

HACC, Central Pennsylvania's Community College (HACC) seeks proposals from qualified firms to provide commissioning authority services for the John J. Shumaker Public Safety Center (PSC) located at HACC's Harrisburg Campus.

Design and land development firms have recently been engaged to design a new Law Enforcement Complex building (47,000 sf +/-) that will include an indoor firing range (rifle and pistol) and supporting administrative, training and classroom space.

The project is in the schematic design phase. The design development documents are expected to be completed in fall, 2010, construction documents in Winter, 2010/11, with a final occupancy date of spring 2012.

The management structure is traditional with full design documents and specification to be developed by an architectural firm. The construction documents will be distributed for bidding and multiple prime contractors one this project will be hired to complete the construction. The Owner's primary construction representative on-site will be Eastern PCM, LLC. The commissioning authority (CA) will report to Eastern PCM, LLC.

The objective of commissioning is to provide documented confirmation to USGBC LEED Silver Standards that the facility fulfills the functional and performance requirements of the building owner, occupants, and operators. The project has been targeted to achieve a LEED-NC v2.2 silver level rating. Commissioning will be implemented in such a manner as to meet the requirements of the LEED rating systems. The scope of work contains the tasks necessary to achieve both the LEED Fundamental Commissioning prerequisite and the LEED credit for Enhanced commissioning.

II. Scope of Work

The CA shall be responsible for carrying out the following tasks. The proposer is free to suggest changes and improvements to this process, however for this proposal the following process will be assumed. For this proposal design phase, construction phase, and warranty period services are requested.

III. Design Phase

1. The CA is to develop a design intent documentation for clarity and completeness, including but not limited to language on the following features: mechanical, electrical, plumbing, architectural, structural, lighting, energy consumption, commissioning, indoor environmental quality, environmental sustainability, exteriors, landscaping, interiors, and functionality for tenants and budget.
2. The CA is to develop a commissioning plan encompassing the design, construction, and operation phases.
3. The CA determines the commissioning requirements for the construction documents, with review by the design team, for integration into the project's construction specifications. The commissioning specification will include a detailed description of the responsibilities of all parties, details of the commissioning process; reporting and documentation requirements, including formats; alerts to coordination issues, deficiency resolution; construction checklist and startup requirements; the functional testing process; specific functional test requirements, including testing conditions and acceptance criteria for each piece of equipment being commissioned.
4. Attend commissioning and pre-bid meetings as needed with project manager and design team.
5. The CA performs a focused review of the design at the completion of schematic design. This review shall be fully documented.
6. The CA performs a focused review of the design at the completion of design development. This review shall be fully documented.
7. The CA conducts a focused review of the design at 60% completion of the drawings and specifications. The review shall be fully documented.
8. The CA performs a focused review of the design at 90% completion of drawings and specifications. This review shall be fully documented.
9. Develop a draft construction phase commissioning plan.

Note: While the commissioning authority is responsible for a complete review and report on the design documents, the design professionals are responsible for developing all design documentation, including design intent, basis of design, and full sequences of operation and logic diagrams for inclusion in the construction documents.

III. Construction Phase

1. The CA shall conduct a pre-construction meeting where the commissioning process requirements are reviewed with the project team members.
2. Coordinate and direct the commissioning activities in a logical, sequential and efficient manner using consistent protocols and forms, centralized documentation, clear and regular communications and consultations with all necessary parties, frequently updated timelines and schedules and technical expertise to satisfy USGBC LEED silver certification requirements for commissioning.
3. Coordinate the commissioning work with the multiple prime contractors and construction manager, to ensure that commissioning activities are being incorporated into the master schedule.
4. Revise, as necessary, the construction phase commissioning plan developed during design, including scope and schedule.
5. Plan and conduct commissioning meetings as needed and distribute minutes.
6. Attend construction conferences at least once monthly across the construction period to address agenda items with regard to scope, coordination and the schedule for necessary commissioning activities, and assist in the resolution of potential field difficulties.
7. Review all submittals for commissioned equipment concurrent to, and within the time constraints of, the design professionals' review.
8. Monitor and statistically sample the completion of the Contractor's construction checklists on a periodic basis to verify that the contractor is following a quality process and is meeting the Owner's design intent.
9. Oversee sufficient construction and startup of the control system and approve it to be used for TAB, before TAB is executed.
10. With necessary assistance and review from installing Contractors, write the functional performance test procedures. Submit to Owner's Representative for review and approval if required.

11. Approve systems startup by reviewing start-up reports and by selected site observation.
12. Review testing, adjusting and balancing (TAB) execution plan.
13. Approve air and water systems balancing through statistical sampling of the report and separate field verification.
14. Analyze any functional performance trend logs and monitoring data to verify performance.
15. Review requests for information and change orders for impact on commissioning and owner's objectives.
16. Review coordination drawings to ensure that trades are making a reasonable effort to coordinate.
17. Write and distribute construction checklists for commissioned equipment.
18. Develop an enhanced start-up and initial systems checkout plan with contractor's for selected equipment.
19. Perform site visits, as necessary, to observe component and system installations. Attend selected planning and job-site meetings to obtain information on construction progress. Review construction meeting minutes for revisions/substitutions relating to the commissioning process. Assist in resolving and discrepancies.
20. Coordinate, witness, and approve manual functional performance tests performed by installing Contractors. Coordinate retesting as necessary until satisfactory performance is achieved.
21. Maintain a master issues log and a separate testing record. Provide to the Owner's Representative written progress reports and test results with recommended actions.
22. Review equipment warranties to ensure that the Owner's responsibilities are clearly defined.
23. Verify the training of the Owner's operating personnel.
24. Compile and submit two (2) copies of a Commissioning Record, which shall include:
 - a. A brief summary report that includes a list of participants and roles, brief building description, overview of commissioning and testing scope, and a general description of testing and verification methods. For each piece of commissioned equipment, the report should contain the disposition of the commissioning provider regarding the adequacy of the equipment, documentation and training meeting the contract documents in the following areas:
 - i. Equipment meeting the equipment specifications,

- ii. Equipment installation,
 - iii. Functional performance and efficiency,
 - iv. Equipment documentation, and
 - v. Operator training.
- b. All outstanding non-compliance items shall be specifically listed. Recommendations for improvements to equipment or operations, future actions, commissioning process changes, etc. shall also be listed. Each non-compliance issues shall be referenced to the specific functional test, inspection, trend log, etc. where the deficiency is documented.
- c. Also included in the Commissioning Record shall be the issues log, commissioning plan, progress reports, submittal and O&M manual reviews, training record, test schedules, construction checklists, start-up reports, functional tests, and trend log analysis.
25. Compile and submit two (2) copies of a Systems Manual that consists of the following: Owner's Project Requirements; Design Narrative and Basis of Design; Performance Metrics; control drawings, sequences of control; and a table of all setpoints and implications when changing them, schedules, instruction for operation of each piece of equipment for emergencies, season adjustment, startup and shutdown, instructions for energy savings operations and descriptions of the energy savings strategies in the facility, recommendations for recommissioning frequency by equipment type, energy tracking recommendations, and recommended standard trend logs with a brief description of what to look for in them.

III. Warranty Phase

1. Coordinate and supervise required seasonal or deferred testing and deficiency corrections and provide the final testing documentation for the Commissioning Record and O&M Manuals.
2. Develop a re-commissioning management manual according to LEED requirements.
3. Return to the site at 10 months into the 12-month warranty period and review with facility staff the current building operation and the condition of outstanding issues related to the original and seasonal commissioning. Also interview facility staff and identify problems or concerns they have with operating the building as originally intended. Make suggestions for improvements and for recording these changes in the O&M Manuals. Identify areas that may come under warranty or the original construction contract. Assist facility staff in developing reports and documents and requests for services to remedy outstanding problems.

IV. Systems to be Commissioned

The following systems, including all components and controls, are the focus of the commissioning process due to their complexity and importance in the final building:

1. Central building automation systems
2. All equipment of the heating, ventilating and air conditioning systems
3. Refrigeration systems
4. Life safety systems
5. Service water systems
6. Emergency power and uninterruptible power supply systems in lieu of emergency generator.
7. Electrical systems
8. Communication and paging systems
9. Safety and security systems
10. Daylighting and lighting control systems
11. Domestic pumping and mixing systems
12. Plumbing systems.
13. Building envelope
14. Additional systems depending upon the LEED credits pursued

V. Desired Qualifications

It is desired that the person designated as the commissioning authority satisfy as many of the following requirements as possible:

1. Have acted as the principal commissioning authority for at least three projects over the last three years.

2. Have experience with the requirements and applications of the USGBC's LEED Green Building Rating System
3. Experience in quality processes
4. Have extensive experience in the operation and troubleshooting of HVAC systems, energy management control systems and lighting controls systems. Extensive field experience is required. A minimum of five full years in this type of work is required.
5. Knowledgeable in building operation and maintenance and O&M training.
6. Knowledgeable in the test and balance of both air and water systems.
7. Experienced in energy-efficient equipment design and control strategy optimization.
8. Direct experience in monitoring and analyzing system operation using energy management control system trending and stand-alone datalogging equipment.
9. Experience with indoor air quality testing procedures.
10. Excellent verbal and writing communication skills. Highly organized and able to work with both management and trade Contractors.
11. A bachelors degree in Mechanical Engineering is strongly preferred and P.E. certification is desired; however, other technical training and past commissioning and field experience will be considered.
12. Experienced in writing commissioning specifications.
13. The CA will be an independent contractor and not an employee or subcontractor of any Prime Contractors on this project, including the A/E.

VI. Instructions to Proposers

A proposer must propose to execute all phases of the commissioning in a single proposal.

The proposal shall be limited to 15 single-sided pages, including graphics. A letter of introduction, section dividers, detailed resumes, and the sample work products of item five below are not included in this limit.

The proposal must be signed by an officer of your firm with the authority to commit the firm.

1. Fill out the attached Commissioning Firm Experience Form.
2. List the key individual who will be the commissioning authority for this contract and describe his or her relevant qualifications and experience. This information is required in addition to any detailed resumes the proposer submits. The contract will require that this individual be committed to the project for its duration.
3. Provide project and professional references and experience for three to five commissioning projects for which the proposer was the principal commissioning authority in the last three years. Include a description of the project, identify when the proposer came into the project, and describe the involvement of each individual on the proposer's team in the projects. For each project, attach a sheet that includes the name and telephone number of the Owner's project manager, construction manager, facility administrator of the building, the mechanical designer, the controls contractor site project manager, the mechanical contractor and electrical contractor.
4. Describe any experience of the proposer's team in the following areas. Least each party's involvement.
 - a. Quality process experience
 - b. O&M experience
 - c. Energy-efficient equipment design and control strategy optimization
 - d. Life cycle costing
 - e. Experience in environmental sustainable design and the LEED rating system
 - f. Project and construction management
 - g. Indoor air quality testing
5. Describe your proposed approach to managing the project expertly and efficiently, including your team participation. Describe what approach you will take to integrate the commissioning into the normal design and construction process in order to make it "business as usual". Describe what you will do to foster the teamwork and cooperation from contractors and designers and what you will do to minimize adversarial relationships. Describe how your work will facilitate the use of your product as a prototype that may be subsequently used by the Owner in future projects, including access to the electronic versions of all documents and forms.
6. As an attachment, provide the following work products that members of the proposer's team wrote.

- a. Commissioning plan that was executed
 - b. Commissioning specifications
 - c. An actual functional test procedure that was executed
7. Provide both an estimated total fee to accomplish the work and an hourly rate for each team member. In addition, the fee should be separated into the cost to achieve the LEED Fundamental Building Systems commissioning prerequisite and the LEED credit for Enhanced Commissioning. The Owner reserves the right to negotiate with the selected proposer, as a professional service and may contract on a fixed fee or time and materials basis.

VII. Submission of Responses

Three (3) copies of the response to the RFP are to be submitted to HACC by **2:00 pm, April 13, 2010** as follows:

Thomas Fogarty, Exec. Director Procurement and Business Services
HACC, Central Pennsylvania's Community College
Whitaker Hall, Room 130A
One HACC Drive
Harrisburg, PA 17110

VIII. Minimum Requirements for Contract Execution

Insurance

The commissioning firm shall obtain, at the firm's expense, and keep in effect during the term of the project, \$1,000,000 professional liability insurance.

Changes in Personnel

If the commissioning firm's personnel or subconsultants change for this project, the Owner must review and approve the replacement personnel, in advance. The replacement personnel shall have, at minimum, equivalent qualifications as the original personnel.

IX - Proposer Warranties

The Proposer warrants as follows:

- a. That it is willing and able to comply with the laws of the Commonwealth of Pennsylvania
- b. That it is willing and able to obtain an errors and omissions insurance policy providing a minimum of \$1,000,000.00 of coverage for the willful or negligent acts, or omissions of any officers, employees or agents thereof.
- c. That it will not delegate or subcontract its responsibilities under an agreement without the prior written permission of the College.
- d. That all information provided by it in connection with the Proposal is true and accurate.

The Proposer affirms as true, under the penalties of perjury, as follows:

- a. The prices in this Proposal have been arrived at independently without collusion, consultation, communication or agreement, for the purpose of restricting competition as to any matter relating to such prices, with any other contractor or with any competitor;
- b. The prices which have been quoted in this Proposal have not been disclosed knowingly by the Proposer, and will not be disclosed knowingly by the Proposer, directly or indirectly, to any other Proposer or to any competitor, prior to the opening;
- c. No attempt has been made or will be made by the Proposer to induce any other person, partnership or corporation to submit a Proposal for the purpose of restricting competition;
- d. Neither the undersigned, nor any partner, principal, officer, director, employee, stockholder, or any other person authorized by the undersigned or any of the foregoing persons, has offered or given any gratuity to any official, employee or agent of HACC or the John J. Shumaker, Public Safety Center, with the purpose of intent of securing an agreement or securing favorable treatment with respect to the awarding or amending of an agreement or the making of any determinations with respect to the performance of an agreement.

Signature of Official: _____

Name (typed): _____

Title: _____

Company: _____

Date: _____

End of Section IX

Fee Proposal

Commissioning Authority Services
Senator John J. Shumaker – Public Safety Center Implementation of Master Plan – Phase 1

A. (_____) proposes to provide all professional
Insert Firm Name
commissioning authority services necessary for the project known as –**Commissioning Authority**
Services.

Proposed Fee for Services - \$ _____

B. Estimated Reimbursable Expenses - \$ _____

(State the Not-To-Exceed Amount of Expenses to be reimbursed)

Percent Mark Up Over Direct Cost - _____

C. Schedule of Hourly Rates:

(Provide schedule of hourly rates by position to be used for additional services; attach a separate sheet)

Submitted by: _____
(Firm Name)

By: _____
(Printed / Typed Name)

Signature: _____ Date: _____

THIS PAGE IS TO BE INCLUDED IN THE FEE SECTION OF YOUR PROPOSAL

Exhibit 1 COMMISSIONING FIRM EXPERIENCE

Company Name	Contact Person	Title	
Address	City	State	Zip
Telephone/Fax	E-mail		

Description of Business

Commissioning Activities

Percentage of overall business devoted to commissioning services _____ %

How long has the firm offered commissioning services _____ Years

Average number of commissioning projects performed each year _____ Projects

Systems (technologies) for which firm has provided commissioning services (check all that apply)

- | | | |
|--|---|---|
| <input type="checkbox"/> Pkg or split HVAC | <input type="checkbox"/> Daylighting | <input type="checkbox"/> Commercial refrigeration |
| <input type="checkbox"/> Chiller system | <input type="checkbox"/> Electrical, general | <input type="checkbox"/> Telecommunications |
| <input type="checkbox"/> Boiler system | <input type="checkbox"/> Electrical, emerg. power | <input type="checkbox"/> Thermal Energy Storage |
| <input type="checkbox"/> Energy Mgmt. System | <input type="checkbox"/> Envelope | <input type="checkbox"/> Labs & Clean Rooms |
| <input type="checkbox"/> Variable Frequency Drives | <input type="checkbox"/> Fire/Life Safety | <input type="checkbox"/> Landscaping |
| <input type="checkbox"/> Lighting Controls | <input type="checkbox"/> Plumbing | <input type="checkbox"/> _____ |

The firm has provided commissioning services in the following: (check all that apply)

Building Sector	LEED Cert. Bldg	New Const. Major Renov.	Existing Building Building tune-up	Equipment Replacement
Office	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Retail	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Grocery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hospitals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Laboratories	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Schools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Universities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Government	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Industrial	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Special purpose	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>